COLORADO RIVER RECOVERY PROGRAM FY-2004/2005 PROPOSED SCOPE OF WORK for:

| 0&M | Ouray | | | |
|---|---------------------------|---|------------------------------------|--|
| Lead Agency: | | Fish and Wildlife Service Ouray National Fish Hatchery | | |
| Submitted by: | | Vernal, U Phone: FAX: | verson 2 100 North | |
| Date: Revised | June 5 d: Nover | * | 001, May 11, 2003, October 3, 2003 | |
| Category Congoing project XX Ongoing-revised project Requested project Unsolicited proposal | | ed project ect | | Expected Funding Source xx Annual funds Capital Funds Other |
| I. | Title of P | roposal: O _l | peration and Maintenance of Our | ay National Fish Hatchery. |
| II. | General R IV. IV.A. | V.A. Genetics Management. V.A.4. Secure and manage genetic stocks in refugia. | | |

Project No.: 29b

Razorback sucker IV.A.4.a.(1) Middle Green River.

Operate and maintain facilities. IV.C. Ouray National Fish Hatchery. IV.C.1.

Green River Action Plan: Mainstem

Augment or restore populations as needed. IV.A.

Develop State stocking plan for the four endangered fishes in the Green IV.A.1.

River.

IV.A.1.c. Implement plan.

III. Study Background/Rationale and Hypotheses

This project is directly related to Section 2.4 IV. "Conserve Genetic Integrity and Augment or Restore Populations" in the Recovery Program Recovery Action Plan (USFWS 2003). One of five elements in the Recovery Program is "native fish stocking". The goal of this element is to produce sufficient captive-reared endangered fishes for conducting laboratory and field research and to develop brood stocks with genetic diversity similar to the wild stock used as founders (Williamson and Wydoski 1994). The need for captive-reared endangered fish and propagation facilities is identified in Wydoski (1994).

Razorback suckers have been propagated on the Ouray National Wildlife Refuge since 1987. The first facilities were established by the Vernal Colorado River Fish Project on the Ouray National Wildlife Refuge and was limited to 3, 0.1 acre ponds, 3, 0.2 acre ponds and two steel buildings housing 14, 4' incubation and rearing troughs, 6, 4' circular tanks, 15, 3' circular tanks and 10, 8' circular tanks. Because of the success shown with the small facility, a decision was made by the U.S. Fish and Wildlife Service (USFWS) to construct a permanent facility using "Stewardship", Drought Relief Funds, Recovery Funds and USFWS funds. The permanent facility was completed in September of 1998 and consists of a hatchery building housing 40, 4' fiberglass hatching troughs; 21, 3' circular fiberglass tanks; 25, 4' circular fiberglass tanks; 15, 8' circular fiberglass tanks; 24, 0.2 acre rearing ponds and 12, 0.5 acre brood (refugia) ponds. The hatchery facility has been used for spawning, incubation, fish tagging, fish health and pond inventory since 1998. Tentative plans for the hatchery are to overwinter approximately 15,000 2001 RBS. The 24, 0.2 acre ponds have been tested with stocking rates ranging from 2,500 to 25,000 swim-up fry per acre. The 0.5 acre ponds are used for broodstock development and maintenance.

Since the Fall of 1998 through the Spring of 2003, the Ouray facility has stocked Green River razorback sucker to wetlands along the Green River and to the Green River in northeastern Utah. Broodstock from 25 individual mated pairs are being maintained. Accurate records of lineage for all fish are be maintained so genetic and stocking plans can be addressed. Spawning and stocking is coordinated with the USFWS propagation coordinator, the current Utah stocking plan and others within the recovery program.

IV. Study Goals, Objectives, End Product:

<u>Goal</u>: To operate a genetically sound captive propagation program for high priority endangered fish species for the RIP in the Upper Colorado River Basin in accordance with the Annual Propagation Operation Plan (Czapla 2003).

<u>Objective</u>: Operate and maintain propagation facilities that are needed to hold, rear, and produce captive-reared endangered fishes for the RIP in the Upper Colorado River Basin in accordance with the Annual Propagation Operation Plan.

<u>End Product</u>: Maintenance of endangered fish in refugia to prevent extinction; development of genetically sound broodstocks for production of young fish for stocking to stabilize or enhance wild stocks; production of captive-reared endangered fish for priority laboratory and field experiments.

V. Study area: Upper Colorado River Basin — Propagation facilities in Uintah Basin, Utah.

VI. Methods/Approach:

Conduct all tasks associated with the operation and maintenance of the Ouray National Fish Hatchery in accordance with the Genetic Management Plan (Williamson and Wydoski 1994; Czapla 1999) and the annual propagation plan (Czapla 2003).

VII. Task Description and Schedule:

All tasks are done annually

- 1. Develop and maintain captive razorback sucker broodstock.
- 2. Maintain genetic refugia of RBS held at the Ouray National Fish Hatchery.
- 3. Spawn razorback sucker broodstock and produce family lots for stocking in the Green River in Utah.
- 4. Over winter pond cultured YOY RBS intensively at the Ouray National Fish Hatchery.
- 5. Stock fry and 4-inch-long razorback suckers into grow-out ponds in spring.

VIII. FY-2004 Work

Salaries

| iaries | |
|--|--------|
| Project Leader (GS-14; \$2,155/wk for 27 wks) | 58,185 |
| Administrative Officer (GS-9; \$1,066/wk for 27 wks) | 28,782 |
| Assistant Manager (\$1,488/wk, full time) | 77,376 |
| Biologist (GS-11; \$1,298/wk for 26 wks) | 33,748 |
| Biological Technician (\$1,046/wk, full time) | 54,392 |
| Maintenance Worker (\$1,028/wk, full time) | 53,456 |
| Seasonal Technician (\$580.5/wk for 16.5 wks) | 9,578 |
| | |

Subtotal salaries \$315,517

| Electricity | 42,481 |
|--------------------------|---------|
| Propane | 27,700 |
| Fish Food | 25,100 |
| Chemicals and Fertilizer | 6,200 |
| Travel & Training | 7,000 |
| Supplies | 7,000 |
| Vehicles | 10,000 |
| Miscellaneous | 1,000 |
| | 442,000 |

FY-2005 Work

Salaries

| Project Leader (GS-14; \$2,263/wk for 27 wks) | 61,094 |
|--|---------------|
| Administrative Officer (GS-9; \$1,119/wk for 27 wks) | 30,221 |
| Assistant Manager (\$1,562/wk, full time) | 81,245 |
| Biologist (GS-11; \$1,363/wk for 26 wks) | 35,435 |
| Biological Technician (\$1,098/wk, full time) | 57,112 |
| Maintenance Worker (\$1,079/wk, full time) | 56,129 |
| Seasonal Technician (\$609.5/wk for 16.5 wks) | <u>10,057</u> |
| Subtotal salaries | \$315,517 |

| Electricity | 43,605 |
|--------------------------|---------|
| Propane | 28,085 |
| Fish Food | 26,255 |
| Chemicals and Fertilizer | 6,510 |
| Travel & Training | 7,350 |
| Supplies | 7,350 |
| Vehicles | 10,500 |
| Miscellaneous | 1,050 |
| | 462,000 |

Ouray National Fish Hatchery Well Maintenance

The Bureau of Reclamation's Well-Team will maintain and service wells including replacing pumps, jet cleaning wells and developing new wells on an annual basis.

| Estimate (FY-04) | 11,000 |
|------------------|--------|
| Estimate (FY-05) | 45,000 |

IX. Budget Summary:

<u>O&M</u> <u>Well</u> FY04: \$440,000 \$11,000 FY05: \$462,000 \$45,000

X. Reviewers:

Various Service and Recovery Program staff.

XI. References:

- Czapla, T.E. 1999. Genetics Management Plan. Upper Colorado River Endangered Fish Recovery Program, Denver, Colorado.
- Czapla, T.E. 2003. Propagation Activities, 2003. Upper Colorado River Endangered Fish Recovery Program, Denver, Colorado.
- USFWS (U. S. Fish and Wildlife Service). 2003. Recovery implementation program for endangered fish species in the upper Colorado River basin. U. S. Department of the Interior, Fish and Wildlife Service, Region 6, Denver, Colorado.
- Williamson, J. H., and R. S. Wydoski. 1994. Genetics management guidelines. Recovery implementation program for endangered fish species in the upper Colorado River basin. U. S. Department of the Interior, Fish and Wildlife Service, Region 6, Denver, Colorado.
- Wydoski, R. S. 1994. Coordinated hatchery facility plan: need for captive-reared endangered fish and propagation facilities. Recovery implementation program for endangered fish species in the upper Colorado River basin. U. S. Department of the Interior, Fish and Wildlife Service, Region 6, Denver, Colorado.